Central Platte Natural Resources District

2010 Annual Report of Water Use Activities in the Central Platte NRD

For the 2011 Platte Basin Meeting

July 2011

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2010 ANNUAL REPORT OF WATER USE ACTIVITIES IN THE CENTRAL PLATTE NRD
TO MEET THE REQUIREMENTS OF THE INTEGRATED MANAGEMENT PLAN
FOR 2011 PLATTE BASIN MEETING

I. SUMMARY OF WATER USE

A. The following is a compilation of records, statistics and historic conditions of water use which have been tracked by the Central Platte Natural Resources District for the year 2010. All information supplied for this summary is organized within a GIS database complete with the locations, attributes and metadata necessary to re-create this report in tabular form. This report has been compiled for the 2011 Platte Basin meeting.

II. CERTIFIED IRRIGATED ACRES

A. In 2006, the district began certifying historic ground water irrigated acres. In order to be certified as irrigated, the land must have been irrigated at least 2 out of the 10 years for the period of 1995 – July 26, 2004. Land within the District, but outside the original State stay on newly irrigated acres (January 6, 2006) was allowed to be developed (newly irrigated) in 2005 and was certified later on in 2008-2009. The initial certification process ended on March 31, 2008; however, land is constantly coming into compliance using FSA compliant photos depicting certified irrigated boundaries and associated 578 Forms of certified irrigated crops with farm and tract numbers. Since that time, additions and de-certifications to the certified irrigated acres database have occurred through December 31, 2010, with a net result of 1,016,589 certified acres.

B. Detailed data regarding number and water source of certified irrigated acres *can be found in* **TABLE 1. Certified Acres** *below*. The difference in total certified acres (2009-2010) reflects newly irrigated acres as well as newly certified, and recertified acres where new evidence of irrigated crop history has been established according to our Rules and Regulations.

TABLE 1. Certified Acres

Year	Acres Certified	Acres of Ground Water	Acres of Surface Water	Acres of Co-Mingled
2009	1,014,530	923,330	16,320	78,544
2010	1,016,589	923,520	14968	78,101
Difference 09-10	**2,059**	**190**	**-1,352**	**-444**

III. VARIANCES

A. Definitions

1. Offsets- A reduction of irrigated acres at one or more locations, that serves to counter-balance or compensate for a transfer of water to another location.

2. Transfers- To allow for, with a District approved Variance, the consumptive use of water to be changed, (either in location or purpose) without causing an increase in depletions to the river or an impact to existing surface water or ground water users. The District will utilize the methodology for calculating depletions and accretions consistent with the other Platte Basin NRD's when evaluating proposed transfers to ensure that the criteria for compliance with Platte River Recovery Implementation Program (PRRIP), which includes the timing, location and amount of the depletion and corresponding offsets, are met.

3. Variance- To allow an exception to the stay on new irrigated acres and new consumptive uses while providing for adequate offsets or transfers to assure that there is no net increase in depletions to the river or impacts to existing surface water or ground water users.

B. Variances were tracked using simple GIS polygons and attributes until 2007. By that date, it was realized that variances were beginning to occur over and over again on the same parcels of land. It was crucial to establish a transfer history on the original, historic certified acre boundary for each field where a variance occurred consecutively and changed the shape of the boundary numerous times. This was remedied by a Variance Geodatabase which was able to track the transfers to and transfers from by date and Variance Code ID's. Therefore, it is very important, when using any future modeling techniques, to pay close attention to the yearly shape of an individual certified boundary which was affected by the variances. For example, a certified boundary in 2006 may have changed half of the acres to dry land and transferred those acres to another parcel for the year. In 2007, the same landowner may have chosen to transfer those acres back to the original certified boundary and repeat the process again in 2008. In any case, the transfers were only allowed to occur with a variance agreement; which stipulated that the net depletion to the river must remain zero. For a detailed list of each variance *refer to the* 2010 DNR Report

Prior to the establishment of a water bank, all variances were transfers of water rights between landowners and no dollar amounts were exchanged. Water was not available for purchase. Transfers were termed Variances through 2008, until the NRD acquired water and began selling from fully appropriated water bank accounts to individuals. Presently all Variances are given a WB transaction number.

IV. APPROVED TRANSFERS

A. Since January 1, 2010, the district has approved 108 transactions of water rights transfers. Each transaction may consist of one or more parcels of land from different sections. For the years 2006-2008 all transactions were considered variances to the CPNRD's rules and regulations. Variances (transfers of irrigated acres) were only allowed if it was determined that there were no new depletions to the Platte River and that any offsets were located UPSTREAM or not more than one mile West of a line North and South of the new use of water.

B. The certified acre total for 2010 involved in these transfers to new irrigated lands is 659.8 acres. The total number of certified acres used to offset the new uses is 494.8. For further analysis and statistics, *see* **TABLE 2. Transfers** *below.* Each transfer resulted in no net increase in stream depletions when computed using the CIR offset calculator developed from the Cooperative Hydrology Study (COHYST) databases and models.

Detailed GIS data will be disseminated to accurately display the necessary information regarding the location, timing, amount and conditions associated with each transfer. *See Appendix* **FIGURE 2. Decertified Water Rights 2010, FIGURE 3. New Use of Groundwater, and FIGURE 4. 2010 Mitigations.** A map of the transfers, retirements and purchases is included in this report. For locations, *see the map in Attachment 2* **Locations of Acres Transferred 2010 and** *the map in Attachment 3* **Locations of Purchases and Retirements 2010.**

C. **Table 2. Transfers**

TABLE 2. Transfers

Year	Acres Certified	# of Transfers (Transactions)	Acres Transferred to New Irrigation	Transferred Offset From Certified Acres	Retired Surface Acres	Retired Ground Acres	Total Affected Acres
2006	398,000	76	768.5	777.6	0	0	1,546.1
2007	952,784.6	122	887.9	1,000.7	0	342.2	2,230.8
2008	1,013,332	97	1004	1,032.9	689.4	351.1	3,799.9
2009	1,014,530	136	2226	519	440.7	667.3	5,488.53
2010	1,016,589	108	659.8	494.8	899	314.1	2367.7
Total	**XX**	**539**	**5546.2**	**3825**	**2029.1**	**1674.7**	**15433.03**

V. WELL CONSTRUCTION PERMITS

A. Irrigation Wells

1. 125 Irrigation Well Permits were issued for 2010

B. Well Permits

1. *See* **TABLE 3. Well Permits Types** *on page 7.* The description of each is as follows:

a. Supplemental Ground Water Wells

1. The Central Platte NRD issued supplemental ground water well permits (coded SG) for the district where ground water wells are constructed to supplement existing ground water wells. There were no increased irrigated acres associated with these wells unless an approved variance was granted with offset acres, although the primary use of the well was to irrigate previously certified land.

In 2010, the CPNRD issued 31 supplemental ground water well permits and 15 of those permits had variances.

b. Supplemental Surface to Ground Water Well

1. The Central Platte NRD issued supplemental surface to ground water well permits (coded SS) for the district where ground water wells were drilled to augment surface water irrigated when surface water was not available. There was no increase in certified irrigated acres unless an approved variance was granted with offsets. Those permits were granted with the stipulation that the ground water well could not be used unless surface water was no longer available. In 2010, the CPNRD issued 1 supplemental surface to groundwater wells. One variance was associated with this permit.

c. Replacement Wells

1. The Central Platte NRD issued replacement well permits (coded RP) where an existing ground water well had become unusable and needed to be replaced (decommissioned). There was no increase in certified irrigated acres associated with these well permits unless an approved variance was granted with offset acres, and the primary use of the well is to irrigate certified land that had been irrigated previously. *See Appendix* **FIGURE 3. Well Permits Issued with Variances and New Acres**. In 2010, the CPNRD issued 70 replacement well permits with variances granted to 23 of these permits.

d. Transfer Wells

1. The Central Platte NRD issued conditional use well permits (coded TF) for the district where ground water wells were drilled and water was bought or transferred to that location and no increase in consumptive use occurred. This land was then considered certified irrigated and the location where it was transferred from with a variance/waterbank transaction, was considered non-irrigated and certified as such. In 2010, the CPNRD issued 5 Transfer permits with variances/water bank transactions.

e. New Wells

1. The Central Platte NRD issued new well permits (coded NP) for the district if the wells had been drilled and surface water rights were purchased from the landowner by the NRD, for example the purchase of the 6 Mile Irrigation Canal water by the district. In 2010, the CPNRD issued 7 new well permits.

f. Dewatering Wells

1. The Central Platte NRD issued dewatering well permits (coded DW) for the district where ground water wells were drilled to help lower the water table around residents with ground water in basements; these were considered permanent wells (over 90 days). In 2010, the CPNRD issued 6 dewatering well permits.

g. Municipal/Industrial

1. The Central Platte NRD issued municipal (coded MU) and industrial/commercial (coded IN) well permits for the district where municipalities/industries may have needed wells for water quantity or quality issues. Also, industrial/commercial may be issued for commercial feedlots or such things as gravel mining operations. In 2010, the CPNRD issued 2 MI and 3 IN permits with 5 requiring variances.

h. Domestic Wells Over 50 Gallons Per Minute

1. There were 0 domestic well permits (coded DO) issued with a pump capacity greater than 50 gallons per minute.

i. Other Permits

1. The Central Platte NRD issued 0 remediation well permits.

For details of the above descriptions, see **TABLE 3. Well Permits Issued by Type**.

TABLE 3. Well Permit Types

2010 Well Permit Types and Corresponding Transfers		
Well Permit Type	**2010**	**Associate Transfer**
CPRP	70	7
CPSG	31	6
CPNP	7	3
CPTF	5	5
CPSS	1	1
CPDW	6	0
CPIN	3	0
CPMI	2	0
TOTAL	125	22

VI. MUNICIPAL AND INDUSTRIAL ACCOUNTING

A. Calculating a Baseline of Municipal Consumptive Use

The District calculates baseline consumptive use for each municipality in the District based on historic consumptive use data. Consumptive use is determined from ground water pumping volumes, wastewater discharge volumes (when available), and/or computer modeling, and converted to a per capita volume. The baseline per capita volume, plus the annual population growth estimated by the Nebraska Department of Economic Development and/or U.S. Census Bureau will be used to determine annual changes in consumptive uses. Changes in consumptive use are tracked annually for each municipality through a reporting and database system administered by the District. There are 30 towns and cities within the CPNRD and the net population increase during 2010 was 1,638. Seventeen towns had decreases in population resulting in 194 Acre-feet less usage. Ten towns had increases in population resulting in 323 Acre-feet addition usage. The estimated 2010 net increase in water consumption was 129 Acre Feet. A table of 2010 results and an estimated 2010 district population map can be found in *Attachments* **Figure 1**. **Estimated 2010 Population of CPNRD Municipalities and Rural Areas Based on Census Bureau Data**.

B. Historic Water Use Survey

The initial Historic Water Use Survey for municipalities was mailed on April 7, 2010, to municipalities throughout the Central Platte NRD. Municipalities were given a deadline of May 7, 2010, to return the survey. A second follow-up mailing was done on June 28, 2010, to the municipalities in the Central Platte NRD that had not met the previous deadline. Municipalities were given a deadline of September 1 2010, to return the survey. A third follow-up mailing was done on January 19, 2011, to the municipalities win the Central Platte NRD that had not met the previous deadline. Municipalities were given a deadline of February 28, 2011. Of the 30 municipalities in the district, 27 have public water supply wells. The 27 municipalities have returned the survey to date. An example of this data from the City of Kearney is included below. The Central Platte NRD has follow-up with all the municipalities and work with them to obtain these data.

TABLE 4. City of Kearney Pumping and Discharge Data 2006-2009

ID	YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL PUMPED
KE-M	2006	124,998,000	113,188,000	119,653,000	157,677,000	287,121,000	332,133,000	349,149,000	241,703,000	184,437,000	152,727,000	116,993,000	118,629,000	2,298,408,000
KE-M	2007	121,878,000	112,068,000	118,092,000	121,083,000	167,550,000	229,070,000	315,843,000	256,441,000	266,122,000	164,152,000	118,944,000	102,854,000	2,094,097,000
KE-M	2008	103,851,000	99,869,000	108,477,000	120,047,000	151,162,000	183,087,000	289,839,000	281,563,000	238,071,000	146,901,000	101,394,000	110,956,000	1,935,217,000
KE-M	2009	113,145,000	100,087,000	115,079,000	129,921,000	175,115,000	181,920,000	287,488,000	287,034,000	212,532,000	129,120,000	104,126,000	111,672,000	1,947,239,000
PUMPING		**463,872,000**	**425,212,000**	**461,301,000**	**528,728,000**	**780,948,000**	**926,210,000**	**1,242,319,000**	**1,066,741,000**	**901,162,000**	**592,900,000**	**441,457,000**	**444,111,000**	**8,274,961,000**
														TOTAL
ID	**YEAR**	**JANUARY**	**FEBRUARY**	**MARCH**	**APRIL**	**MAY**	**JUNE**	**JULY**	**AUGUST**	**SEPTEMBER**	**OCTOBER**	**NOVEMBER**	**DECEMBER**	**DISCHARGED**
KE-M	2006	111,240,000	102,380,000	111,060,000	111,140,000	112,470,000	113,420,000	117,100,000	126,550,000	118,420,000	120,890,000	116,590,000	118,930,000	1,380,190,000
KE-M	2007	122,450,000	109,260,000	114,730,000	118,120,000	138,280,000	128,510,000	128,110,000	144,150,000	130,310,000	123,730,000	111,470,000	111,450,000	1,480,570,000
KE-M	2008	108,080,000	101,860,000	105,960,000	104,230,000	106,530,000	118,100,000	126,520,000	121,830,000	113,460,000	126,040,000	119,620,000	117,830,000	1,370,060,000
KE-M	2009	115,110,000	97,550,000	106,230,000	102,470,000	102,270,000	108,750,000	115,010,000	117,260,000	116,230,000	115,700,000	104,910,000	105,050,000	1,306,540,000
DISCHARGE		**456,880,000**	**411,050,000**	**437,980,000**	**435,960,000**	**459,550,000**	**468,780,000**	**486,740,000**	**509,790,000**	**478,420,000**	**486,360,000**	**452,590,000**	**453,260,000**	**5,537,360,000**
DIFFERENCE		**6,992,000**	**14,162,000**	**23,321,000**	**92,768,000**	**321,398,000**	**457,430,000**	**755,579,000**	**556,951,000**	**422,742,000**	**106,540,000**	**-11,133,000**	**-9,149,000**	**2,737,601,000**
PUMP - DISCHARGE														

The initial Historic Water Use Survey for industrial/commercial and public water supply operators was mailed on July 28, 2010, to industrial/commercial and public water supply operators throughout the Central Platte NRD, which had wells registered as pumping 50 or more gallons per minute. These operators were given a deadline of September 1, 2010. A second follow-up mailing was done on May 31, 2011, to the industrial/commercial and public water supply operators in the Central Platte NRD that had not met the previous deadline. These operators were given a deadline of July 3, 2011, to return the survey. There were 14 historic Water use Surveys mailed for industrial/commercial and public water supply to operators in the district. Of that 14, 8 of the surveys have been returned to date. The Central Platte NRD intends to follow-up with the remaining and any new industrial/commercial and public water supply operators and work with them to obtain the data.

C. Certified Irrigated Cropland to Urban Development

To account for municipal offset, CPNRD has evaluated the quantity of certified irrigated cropland that has been converted to urban development. The CPNRD examined 7 cities throughout the district to determine this change as per the 2004 CPNRD certification process.

2005 urban development baseline was first established for the following 7 cities: Silver Creek, Central City, Grand Island, Kearney, Lexington, Cozad, and Gothenburg. New urban development was only identified for 2006, 2007, 2008, and 2009 within 3 miles of city limits. We have future plans to incorporate the entire district into this evaluation. The 2010 updates of this data have not been completed at this time.

VII. FLOW METER DATA

A. The NRD does not require or collect pumping data for the Intergrated Management Plan (IMP).

VIII. WATER BANKING ACTIVITIES

A. Geo-Spatial Waterbanking Software

1. Planning began for the waterbanking software in 2006. A GIS company, Applied Data Consultants, was chosen to customize ArcGIS software to allow for efficiently computing the net impact to the river based on transfers of irrigation. The software directly utilized the latest COHYST crop irrigation requirement (CIR) coefficients, modeled stream depletion percentages and recharge calculations to display, track and catalog the net depletion effects to the Platte River for every polygon within a transaction. The long-term goal of the project is to ensure and provide evidence that as a result of each transfer of water rights, the net depletion to the river is zero. Below is a list of the transfer types which are tracked in our database.

   The waterbank transactions are separated into 5 transfer type procedures:

   1- Modifications: Geographic modifications to existing certified acres. (changes in the shape of the polygons)

   2- Purchases: Procedure where a landowner or entity purchases water rights from the waterbank to transfer to newly irrigated acres or other uses. (calculated in acre-feet of impact to the river and measured in acres)

   3- Retirements: Transactions in which the Central Platte NRD purchases and holds a conservation easement to the water right (ground water/surface water or co-mingled.) The water right is permanently retired.

   4- Transfer To: Any procedure where a water right is moved to allow new irrigation. The instance of a "Transfer To" will occur with a purchase where a landowner purchases water from an NRD account and then transfers the water right to his/her land. A transfer to will always accompany a "Purchase" or "Transfer From."

   5- Transfer From: Procedure which designates acres or acre-feet of water rights that are to remain dry land and will offset a new use. It differs from "Purchase" in that no money is exchanged from the CPNRD Water Bank.

B. Over-Appropriated Area

1. Water Right purchases within the over-appropriated area, or whose consumptive use changes impact the over-appropriated area, are held by

permanent conservation easements for the purpose of fulfilling the obligations through State Statute. These water rights are not available for sale.

2. FY 2010, the CPNRD acquired perpetual conservation easements on water rights in Dawson and Buffalo Counties.

The estimated accretion to the Platte River from ground water retirements using the latest COHYST offset calculator is 131.6 acre feet (ac/ft). The estimated accretion to the Platte River from surface water retirements is 697.9 ac/ft.

Over-Appropriated Zone Purchases:
See **TABLE 5. Over-Appropriated Zone Purchases 2010** *on the following page* shows the 2009 and 2010 gains to the river.

S*ee map in Appendix* **FIGURE 3. Locations of Purchased Water Rights 2010.**

Table 5. Over-Appropriated Zone Purchases 2010

Township	Range	Section	County	Acres	Surface/Ground	TransactionID	2009 Gain to River	2010 Gain to River
9	19	7,18	Dawson	133	Surface	225	93.90	93.90
9	12	33	Dawson	28.14	Ground	276	20.70	11.57
9	23	13	Dawson	70	Ground	277	40.23	17.04
9	19	36	Dawson	79.72	Surface	278	33.06	51.48
9	20	36	Dawson	74	Surface	279	42.10	58.99
9	19	18	Dawson	123.5	Surface	280	83.80	116.31
10	21	7	Dawson	76.02	Surface	281	38.30	50.67
9	19	36	Dawson	38.28	Surface	282	16.22	24.72
10	22	5	Dawson	50.3	Ground	291	16.30	7.67
11	25	14	Dawson	100.8	Ground	297	64.90	35.10
8	18	3	Buffalo	107.04	Surface	298	8.50	16.65
10	20	34	Dawson	72.3	Surface	299	47.20	64.18
10	21	21	Dawson	42.68	Surface	300	19.10	25.35
9	20	1	Dawson	41.79	Surface	301	28.20	38.71
9	19	20	Dawson	100.7	Surface	302	60.10	85.89
9	22	25	Dawson	24.2	Ground	325	16.70	7.64
9	21	29	Dawson	139	Ground	338	99.70	45.13
10	21	16	Dawson	106.1	Surface	326	30.50	71.02
12	24	4	Dawson	1.34	Ground	339	15.80	7.46
						TOTAL	**775.31**	**829.48**

C. Formulas Used for Calculating Net Depletion

The District established a water bank for the purpose of encouraging and facilitating the transfer of water between users. The District has and will continue to purchase or account for transfers of water use using a water budget approach that nets no change in stream flows for a given time and

location. The District holds the transferred water uses in its water bank for the purposes of:

(1) off-setting new or expanded water uses;

(2) saving water to meet statutory requirements or interstate agreement obligations;

(3) saving water to meet future incremental targets toward achieving a fully appropriated condition; or

(4) future water sales to individuals as offsets for development of new consumptive uses of ground water within the District.

In determining the amount of accretions to the stream that will be placed into the water bank, due to the transfer of ground water or surface water uses, the District and the Department will agree on the best available tools to utilize for calculating stream flow accretions (i.e. the "bankable" volumes of water). The calculations used at this time to determine the accretions to be put into the water bank are based on long-term average water budgets. The relationship of ground water pumping, and ground water recharge on stream flows accretions or depletions were established using the COHYST EMU MODFLOW ground water model. The ground water model was run for a fifty (50) year period and the percentage value for year 50 was used to determine the stream flow accretion or depletion for the water budget analysis. The water budget analysis is an accounting process that considers the change from present water use to future water use, on a given tract of land. Present water use is computed as the net ground water withdrawal for an irrigated corn crop (Crop Irrigation Requirement (CIR) minus the precipitation recharge for irrigated corn). The future water use considers the new land use; which is typically dry land corn or grassland with no irrigation net ground water withdrawal is negative and is equal to the ground water recharge for the dry land corn or pasture. The accretion to the Platte River is then computed as the change in net ground water withdrawal multiplied by the stream depletion percentage to obtain a number for the volume of water being supplied to the river. The water banking analysis of water supply is consistent with the methods used to evaluate transfers as described in subsection II.C.4.d (2) of Chapter 5 of the District's IMP. Additionally, these calculations determine the timing and location of stream flow changes due to the transfer to the water bank and any impacts to existing ground water or surface water users. The following formulas are utilized to ensure the correct timing, location and quantity of the offsets:

TABLE 6. Net Depletion Formulas

Groundwater Transfers/Retirements

·Present Usage assumes Irrigated Corn

Net Depletion = % *Depletion* X $[(CIR - Recharge) \div 12] \times Acres$

·Future Usage assumes Dryland Corn

Net Depletion = % *Depletion* X $[(Recharge) \div 12] \times Acres$

·Net Ground water usage = Irrigated corn depletion + dryland corn depletion

·Positive Net Groundwater Usage means increased GW Withdrawal and increased Platte River Depletion

·Negative Net Groundwater Usage means increased GW recharge and increased Platte River Stream flow

Surface Water Transfers /Retirements assuming no future ground water use.
·Current Condition Usage assumes Irrigated Corn and Current Condition Recharge:
SW Depletion = $[(CIR) \div 12] \times Acres$ + [% depletion x (recharge /12)] x Acres
·Future Condition assumes Dryland Corn
Net Depletion = % *Depletion* X $[(recharge) \div 12] \times Acres$
·Net Depletion of Surface Water use = *SW Depletion – Dry land Condition net depletion*

Surface Water Retirements with future ground water use.
·Current Condition Usage assumes SW Irrigated Corn and Current Condition Recharge
SW Depletion = $[(CIR) \div 12] \times Acres$ - [% depletion x (on-farm loss/12)] x Acres
·Future Condition assumes GW irrigated Corn
Net Depletion = % *Depletion* X $[(CIR + onfarm\ loss) \div 12] \times Acres$
·Net Depletion of Surface Water use = *SW irrigation Depletion – GW irrigation net depletion*

Feedlot Conversions (Feedlot to Irrigated Corn)
·Consumptive use of cattle/day = 7 gal/day
·Total head of cattle x 365 days
365 (day) × 7 gal/day/head × *% depletion – Future use (CIR) = Future Net Depletion*
325,851 gal / ACft.

C. Fully Appropriated Area

1. The Central Platte Natural Resources District has implemented certain rules within the fully appropriated area to achieve and/or maintain a balance between water uses and water supplies so that the economic viability, social and environmental health, safety, and welfare can be achieved and maintained for both near-term and long-term, considering the effects on existing surface water appropriators and ground water users.

   Any person who desires to transfer the location of use of ground water from wells located within the district, may do so only after applying for and obtaining approval from the NRD on forms provided by the District. Transfer of location of use of one acre or more to newly irrigated lands will only be allowed for row crops on Class I, Class II, Class III, Class IVw and Class IVs soils as identified in the NRCS Standard Soils Survey, and transfers for irrigation will only be allowed for Class IVe soils if the area remains in alfalfa or grass. The transfer of location and the withdrawal of use at the new location shall be consistent with all applicable state statutes, ground water management plans and goals, and rules and regulations of this District. In addition, such transfers shall be conditioned upon and limited to, transfers in which the land where the right is transferred from remains in dry land agricultural use. Once granted, such permits will remain in force for the period of time covered by the transfer, or until the owners of the wells that are the subject of such transfer notifies the NRD in writing that the permit should be cancelled, or until the NRD Board of Directors determine that such transfers are no longer in the best interest of the public.

2. The CPNRD has purchased water rights from 2 tracts of land for the purposes of offsetting new irrigation within the fully appropriated area. Eligible landowners are able to purchase water from these water bank accounts on a first come first served basis in order to develop and irrigate new lands which comply with our rules and regulations.
    a. Additional offsets are required for those that wish to purchase water rights for the purpose of irrigating Land Capability Class VIe or Vw soils at a rate of 1.5 acres or the acre-feet amount; whichever is greater with the extra amount of the offset (i.e. that amount of the offset not needed for the irrigation of grass on Class VIw and Class VIe soils) going to the Central Platte NRD's Water bank.

See **Table 7. Purchases of Water Rights within the Fully Appropriated Area**.

Table 7. Purchases of Water Rights within Fully Appropriated Area

Township	Range	Section	County	Owner's Name	Acres	Ac./Ft. to River	Surface/Ground	TransactionID
14	8	33	Merrick	Wieck Brothers LTD Partnership	54.9**	1.11	Ground	230
10	16	w31	Buffalo	Jacobson Family Trust	62.8	43.57	Surface	323

****** *Correction from July 21, 2011 Basin Meeting*

D. Summary of all Waterbanking Activities

1. By the close of 2010, the CPNRD water bank had a balance of 2,906 acre feet of water rights available for offset in the over-appropriated area.
2. The distribution of all waterbanking activities as they correspond to the PBHEP Priority Zone Curves are shown in the *Appendix* **Item 6 Percentage Summary of Acres By Priority**.

3. CPNRD policy is to allow the purchase of water rights from the fully-appropriated waterbank accounts, as long as the land that the water rights are transferred to is downstream (East) or within 1 mile of a North/South line of the parcel to be offset. There were 6 transactions involving waterbank purchases in 2010. The 6 transaction involved were purchased from accounts originally retired in 2009.

Locations of the acres transferred are shown on map- *see Attachment* **2 Locations of Acres Transferred 2010.**

IX. OTHER STREAM FLOW ACCRETION ACTIVITES

A. The CPNRD has a variety of proposed projects which may positively affect Platte River Stream flows. The studies and analysis for these projects are not yet completed.

X. GROUND WATER LEVELS

A. The tracking and reporting of ground water levels are not required in the IMP.

ATTACHMENTS

APPENDIX